## The Bromeliad, Guzmania monostachya, An Endangered Plant in Florida

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Guzmania monostachya (L.) Rusby ex Mez (fig. 1,2), sometimes in Florida called Fuch's bromeliad, is the only species of this genus native to Florida. It occurs in southern Central America, northern South America, the West Indies, and rarely in southern Florida (1, 2, 3, 4, 5, 6). The showy red bracts of the flower spike make this species quite ornamental and highly desired by collectors. This and several other highly ornamental species of Guzmania are being propagated and are available in the nursery trade.



Fig. 1. Flowering plant of Guzmania monostachya (D.P.I. Neg.file #702049)



Fig. 2. Fruiting G. monostachya in natural habitat in Dade Co. (D.P.I. Neg. file #702049)

DESCRIPTION: Plant epiphytic or occasionally terrestrial, essentially stemless or with a short stem, roots from stem serving as anchorage; leaves in rosette, light green, soft, flexible, almost parallel-sided, without spines, 25-30 cm long, 2.5 cm wide, tips abruptly tapering to a point, leaf bases sheathing stem and forming a cup which holds water; flowering stem from center of rosette, erect, 10-15 cm long, elongating somewhat in fruit; inflorescence simple, cylindrical, 8-15 cm long, 2-3 cm wide, sterile in upper part, at first dense, elongating and becoming loose with age; lower (fertile) bracts whitish or pale green with brown or reddish longitudinal markings (markings rarely absent), upper (sterile) bracts red (variously reported as salmon pink to bright red, vermillion, or scarlet) or rarely white; flowers white, 3 cm long, protruding slightly from bracts; capsule cylindric, 2-3 cm long; coma white (1, 2, 3, 4, 5, 6).

DISCUSSION. G. monostachya could at one time in Florida be found occasionally in hammocks from Homestead south and west with outliers reported as far as the Fakahatchee Strand in Collier County. A combination of collecting, clearing, development, and weather (such as hurricanes and freezes) has decimated most of these populations. This species now can be found in significant numbers in only one hammock in Dade County (6). This hammock is public property, but not open to the general public or to collecting.

Even though <u>G</u>. <u>monostachya</u> is rather widely distributed outside Florida, the small Florida population represents a distinct genetic group. Elimination of this population would eliminate a significant portion of the genetic diversity of the species and an important part of the South Florida ecosystem.

This and other endangered plants are protected under the Preservation of Native Flora act, Section 581.185, Florida Statutes. This law, among other things, prohibits taking endangered plants from the wild without both permission of the landowner or custodian and a collecting permit issued by the Division of Plant Industry. Since the only significant population of this bromeliad is on public land held especially for its preservation, no permission to collect will be granted, and no collecting permit will be issued. Persons wishing to obtain plants of  $\underline{G}$ . monostachya can obtain nursery-propagated plants from reputable, registered nurseries.

SURVEY AND DETECTION: Those persons involved in checking compliance with the law (Section 581.185) should look for bromeliads the roots of which show signs of removal from trees rather than having been nursery-grown. G. monostachya when not in flower is a rather nondescript rosette-type bromeliad with soft, flexible, light-green, non-spiny, non-scaly leaves with nearly parallel sides, tapering abruptly to a point at the tip. If a violation is suspected, positive identification will be necessary before final action is taken.

## LITERATURE CITED

- 1. Long, R. W, and Olga Lakela. 1971. A flora of tropical Florida. Univ. Miami Press. 962p.
- 2. Padilla, Victoria. 1973. Bromeliads. Crown, New York. 134p.
- Rauh, W. 1979. Bromeliads for home, garden, and greenhouse. Blanford, Poole, Dorset. 43lp.
- 4. Small, J. K. 1933. Manual of the southeastern flora. Univ. N. C. Press, Chapel Hill. 1554p.
- 5. Smith, L. B., and R. J. Downs. 1977. Flora Neotropica 14(3):1336-1339.
- 6. Ward, D. B., ed. 1978. Rare and endangered biota of Florida, Vol. 5, Plants, Univ. Presses Fla., Gainesville. 175p.